

REMARKS/ARGUMENTS

Introduction

The present Response is directed to the Office Action mailed on July 21, 2006. Applicant is thereby withdrawing the Appeal filed on November 21, 2006. Applicant continues to maintain that the claims which were appealed are patentable over the cited art. However, upon reflection, a decision has been made to incorporate additional limitations into the pending claims (28-39), for the purpose of advancing prosecution through a route which is a bit more direct than the appeal process. Claims which were non-elected and withdrawn pursuant to the Restriction Requirement have been canceled, without prejudice.

General Remarks in Regard to Final Office Action

A general review of the cited references should not be necessary, in view of the fact that they were discussed in considerable detail previously. However, the undersigned believes that some comment on the Examiner's "Response to Arguments" is very appropriate. First, Applicant continues to maintain that McMordie et al (U.S. 5,650,235) is distinct from the invention of pending claim 28. The limitation regarding the exclusion of hexavalent chromium cannot be met by compositions which specifically allow for such a component. Moreover, the limitation regarding the mandatory presence of colloidal silica cannot be met by compositions which do not contain such a component. Furthermore, the reference is clearly directed specifically to platinum enrichment, and shows no recognition of the motivation to determine a specific region of

aluminum diffusion. Applicant submits that the region of diffusion cannot be “read into” the reference.

In regard to comments on the relevance of the Mor reference (U.S. 6,428,630), Applicant continues to maintain that the patent is not depositing a slurry coating onto a metal substrate, as in the present invention. The Examiner’s statement which bridges pages 5 and 6 of the Office Action is not understood in this regard. Deposition onto a coating is not the same as deposition onto a substrate. A review of the specification and claims of the present case provides a very clear indication of one of the key objectives of the invention: increasing the aluminum content of the substrate (e.g., paragraph 7). Thus, the process depends on application of a material specifically to that substrate. Mor is not doing that, and never suggests such a process step. Applicant also respectfully disagrees with the Examiner’s view in regard to the “purpose” for a claimed method. (See first full paragraph of the Office Action, page 6). This point is discussed below, in reference to the Baldi patent.

Remarks in Regard to Rejections Under 35 U.S.C. 102 and 103, as They Relate to the Amended Claims

As alluded to above, Applicant has incorporated limitations into claim 28. (These limitations also relate directly to the Baldi reference, U.S. 5,102,700. Thus, these comments are also directed to the portion of the Examiner’s “Response to Arguments” which dealt with that reference). In brief, claim 28 was amended to include the presence of an organic stabilizer which

contains at least two hydroxyl groups. (Independent claim 38 already contains similar limitations).

The presence of the organic stabilizer is highly desirable for certain embodiments of the present invention. A good portion of the specification describes the use of various stabilizers, along with many other working details. (See, for example, paragraphs 33-42). As described in the referenced sections, the stabilizer is used primarily to chemically stabilize the aluminum- or aluminum-silicon component during contact with aqueous components. (This is clearly an issue for the aqueous-based slurry compositions). The term “chemical stabilization” for these types of slurry systems is defined in detailed fashion in paragraphs 40 and 41. Moreover, the motivation to include a chemical stabilizer is directly linked to the purposeful elimination of chromates from the composition.

As emphasized during earlier prosecution, while Baldi describes an aluminide-forming composition, the reference has very little to do with the present invention. The Examiner maintains that this patent is being used only for the teaching of a “binder/organic stabilizer”. However, Applicant must emphasize that Baldi’s reference to a “binder-type compound” (column 3, line 11 et seq.) appears to have nothing to do with the stabilizer in the present instance. The language in the patent regarding “binders” has been studied carefully. There is no suggestion that Baldi is using these compounds to chemically-stabilize the slurry, as described for the present invention. Instead, the patent appears to be related only to binder properties. The only elucidation of “binder” in Baldi is in column 2, line 21 et seq., which has nothing to do with Applicant’s invention. A process step carried

out for a purpose unlike that of the claimed invention does not make the invention obvious.

As also emphasized previously, Baldi fails to describe a single composition which includes both colloidal silica and an aluminum-based powder, as in the present invention. Moreover, the use of chromium constituents is clearly described (col. 4, line 64 to col. 5, line 3), in marked contrast to the present invention. Clearly, then, Baldi never recognized the problem of using chromates, or envisioned a solution to that problem.

Claims 45-47 have been added here. The claims find support in the application as originally filed, and do not raise any new matter issues. The subject matter of Claim 45 was discussed in part above, in regard to chemical stabilization. Stabilization in this manner is often required because of the purposeful elimination of the chromate material from the composition. (See paragraphs 13 and 40-41, as well as the examples). Claim 46 recites a specific level of organic stabilizer preferable for some embodiments (as recited in original claim 21, for example). Finally, claim 47 covers the possibility of utilizing more than one organic compound as the stabilizer material, as described at the end of paragraph 33 of the specification.

Conclusion

Applicant respectfully submits that a strong case for allowance of the pending and new claims has been made here. Should the Examiner believe that anything further is needed to eliminate any remaining issues, the undersigned would welcome a telephone call. The contact information is provided below.

Respectfully submitted,

  
Francis T. Coppa  
Reg. No. 31,154

February 21, 2007

General Electric Company  
Building K1, Room 3A67  
Niskayuna, New York 12309  
Telephone: (518) 387-7530